

disc brake and a PCB (Printed Circuit Board) ~~(4, 14, 21, 30)~~; and that the code parts have code paths turned towards the detectors ~~(5, 6, 24, 35, 36)~~ of the PCB ~~(4, 14, 21, 30)~~.

4. (currently amended) The sensor of claim 3, characterized in that the code on the one or more code wheels ~~(2, 13, 20, 29, 44, 45, 50, 57, 58)~~ and/or one or more sliding parts ~~(3, 15, 22, 31, 46, 51, 52)~~, respectively are formed by magnets ~~(7, 8)~~, by light and dark sectors or by holes or no holes.

5. (currently amended) The sensor of claim ~~3~~ or 4, characterized in that the detectors ~~(5, 6, 24, 35, 36)~~ are received on the PCB ~~(4, 14, 21, 30)~~; that the PCB ~~(4, 14, 21, 30)~~ has circuitry to relate the signals from the detectors ~~(5, 6, 24, 35, 36)~~ to the actual wear of the lining material of the brake; that the two or more code parts ~~(2, 3, 13, 15, 20, 22, 29, 31, 44, 45, 46, 50, 51, 52, 57, 58)~~ are arranged on the same side of the PCB ~~(4, 14, 21, 30)~~ or on opposite sides of the PCB ~~(4, 14, 21, 30)~~; and/or that a Graycode is used.

6. (currently amended) The sensor of ~~any of the claims 3 to~~ claim 5, characterized in that the detectors ~~(5, 6, 24, 35, 36)~~ are optical detectors, magnetic sensors or mechanical switches.

7. The sensor of claim 6, characterized in that the detectors are magnetoresistive sensors or hall effect sensors.

8. (currently amended) The sensor of ~~any of the previous claims~~ claim 7, characterized in that the code wheel ~~(2, 29, 44, 50)~~ rotated continuously by the adjustment shaft or a part ~~(18, 23)~~ drivingly connected to the code wheel ~~(13, 20)~~, has a finger ~~(9, 16, 28)~~ for co-operation with teeth ~~(10, 38, 49, 52, 54)~~ of the sliding part ~~(3, 15, 22, 31, 46, 51, 52)~~ and that the finger ~~(9, 16, 28)~~ is arranged to advance the sliding part ~~(3, 15, 22, 31, 46, 51, 52)~~ a distance corresponding to one tooth for each turn of the code wheel ~~(2, 13, 20, 29, 44, 50)~~.

9. (currently amended) The sensor of ~~any of the claims 3 to~~ claim 7, characterized in that seven detectors ~~(5, 6, 24, 35, 36)~~ are arranged on the PCB ~~(4, 14, 21, 30)~~ for reading of up to four different paths on each of the code wheels ~~(2, 13, 20, 29, 44, 45, 50, 57, 58)~~ and the sliding part ~~(3, 15, 22, 31, 46, 51, 52)~~.

10. (currently amended) The sensor of claim 8 ~~or 9~~, characterized in that a part drivingly connected to the adjustment shaft ~~(11)~~ or an extension of the adjustment shaft ~~(11)~~ is received in a slot ~~(37)~~ of the sliding part ~~(15, 22)~~ and/or that a clamp ~~(25, 32)~~ is biased by means of a spring ~~(26, 33)~~ against teeth ~~(43)~~ of the sliding part ~~(22, 31)~~.

11. (currently amended) The sensor of ~~any of the previous claims~~ claim 10, characterized in that it comprises three code parts ~~(44, 45, 46; 50, 51, 52)~~.

12. (currently amended) The sensor of claim 11, characterized in that the three code parts are two code wheels ~~(44, 45)~~ and one code rack ~~(46)~~.

13. (currently amended) The sensor of claim 11, characterized in that the three code parts are one code wheel ~~(50)~~ and two code racks ~~(51, 53)~~.

14. (currently amended) The sensor of ~~any of the claims 1, or 3 to~~ claim 10, characterized in that it comprises two code wheels ~~(57, 58)~~.